Easy Clicker Template

Documentation

(Unreal Engine 4 and 5 Resources)



Documentation written by AVAROZ.

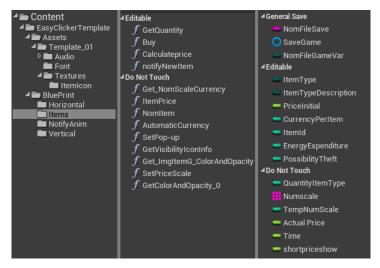
Manual version: 4.22 - 4.27 and 5.2

Last update: 30/05/2023
Latest update: - Discord channel.

1. INTRODUCTION:

The Easy Clicker template was designed flat, easy to use, efficient and a great starting point for anyone who wants to create a finished product with ease.

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Easy editing: All variables, functions, and files have easy-to-understand names and purpose, and are logically organized for quick search and editing.



Minimalist interface: The interface is designed so that by replacing some images you can get a completely different design.



Blueprint by blocks: Each blueprint is in independent blocks, they can be easily organized, distributed, deleted according to the needs, some are used to load several blueprints of the same type to list objects such as items.



Progressive game: You can create different items in seconds, with different values, which are set with basic variables, and these items can be unlocked over the course of the game.

2. CREATE NEW ITEM

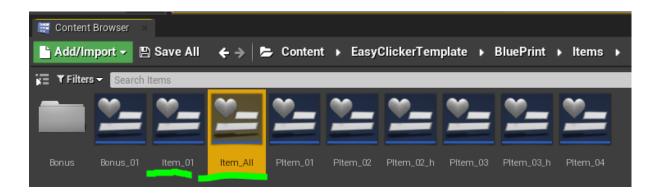


2.1 What is an item?

A new Item is the basis of the game, these produce the currency of the game, with which you can buy more items and produce more coins in less time.

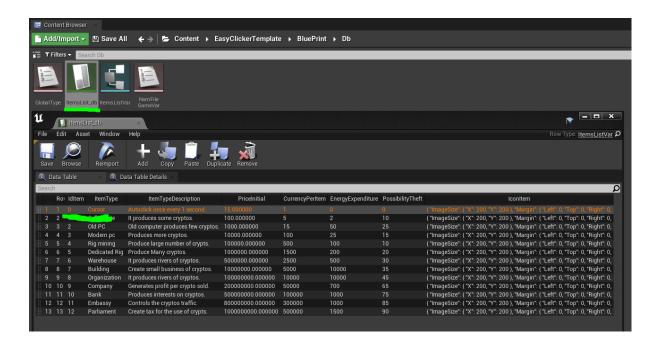
We must understand that for an Item to work correctly, it must have a physical file, a blueprint or widget and a table with the data.

Within the physical files we find that the first widget will be called Item_01 and will represent Item number 0 which is the Cursor in the Items Table, all other items in the table will load their data into the Item_All widget.



This is how you look at the table of items, as we can see it goes from Id 0 to 12, therefore there are 13 items already created.





Important information: the first item has the id 0, therefore an item 12 would have the id 11. This is because the first index position always starts with the value 0.

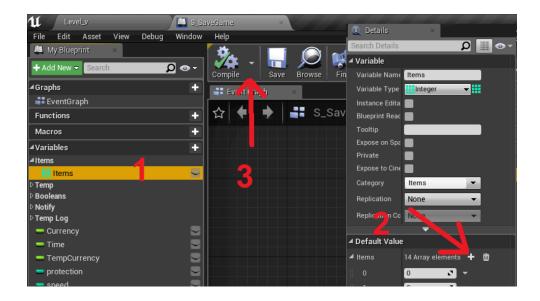
2.2 How to add a new item?



2.2.1 First we will open the file **S_SaveGame** in the route:

Content/EasyClickerTemplate/Blueprint/Db

2.2.2 We go to the Variable>Items tab, on the left side and select the **Items (Integer)** variable, then on the right tab, we press the button with the plus sign, finally we save and compile.

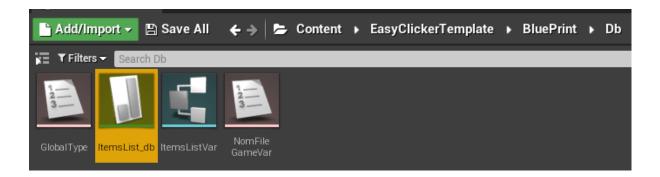


Let's review this as follows, the cursor is Item 1 but in the array it is 0 and item 13 is Parliament but in the array it is 12.

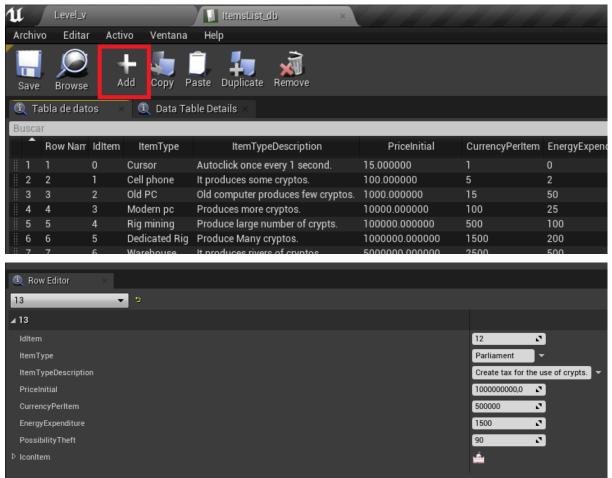
# Item	Nombre Item	Array Id
1	Cursor	0
2	Cell phone	1
3	Old PC	2
4	Modern pc	3
5	Rig mining	4
6	Dedicated Rig	5
7	Warehouse	6
8	Building	7
9	Organization	8
10	Company	9
11	Bank	10
12	Embassy	11
13	Parliament	12

2.2.3 We open the file ItemsList_db in the route Blueprint>Db.





2.2.4 Click on Add **(+)** to create a new item and fill in the data. Or you can modify the names, description and data of the 13 items already created to suit your game.



2.2.5 When a new record is created it takes this form:



You must double click on NewRow to change the name to the following in this case 14.

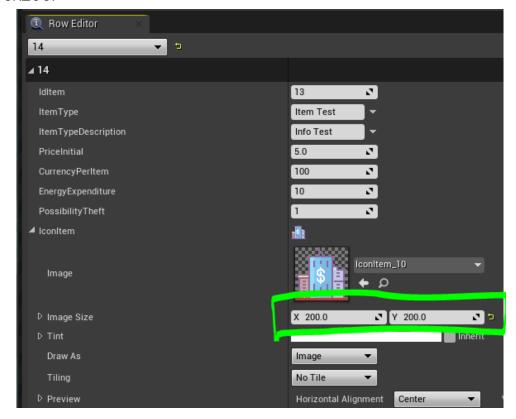




2.2.6 Now you must replace the 0 with 13 since the previous Item has the number 12 and is called Parliament, then you fill in all the data following the structure of the other items.

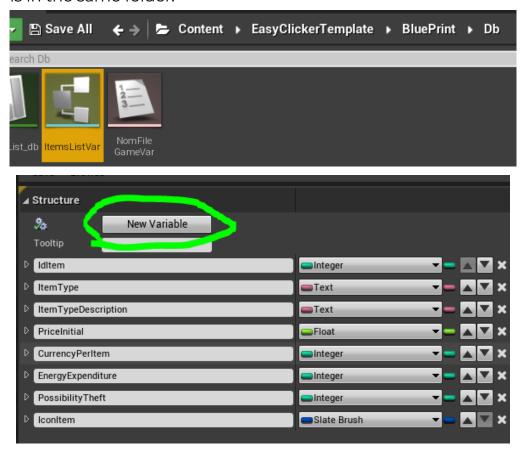


2.2.7 As a recommendation in IconItem, when selecting the image it will take a different size, I recommend adjusting this value to 200x200.





2.2.8 If you want to change the name of a tuple or add a new data to all the items of the table, you must open the file **ItemsListVar**, which is in the same folder.



2.2.9 This process of adding a new field must be done in 3 places. Since at the moment we only add a new record to the table, but we still need to tell the physical widgets that they should show the item.

Wd_itemslist	ltemslist_db	S_savegame
Here they will load all the items inside a "Scroll Box" by default the first Item 0 which is the cursor is already included.	It is the table where the items are listed, we have already done this step, but it is important to take it into account.	The file where the variables are set to create the save file so that the data can be retrieved.
Route: Content/EasyClickerT emplate/Blueprint	Route: Content/EasyClickerT emplate/Blueprint/D b	Route: Content/EasyClickerT emplate/Blueprint





2.2.10 We open the file **Wd_ItemsList** and the route Blueprint and we modify the variable **NumItems** (Integer), must match with the Array of Elements **S_savegame** y **Items_list_db** and we save.

This is the default data list of the items in **ItemsList_db**, please keep in mind when filling them out.

Name Var	Description	Image
Row_Index	When a new item is created, it increments, it cannot be modified. Nothing should be done. It usually has no name.	



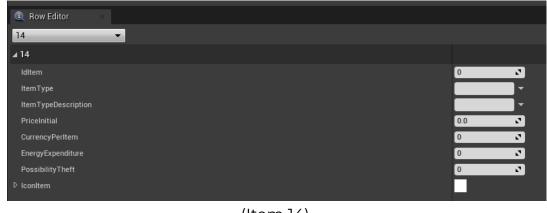
Now_Name

This field is created with the name of NewRow, by double clicking you can change the name, you

must place the number following the previous one.

Example:
Previous number: 13
Next you must place:
14

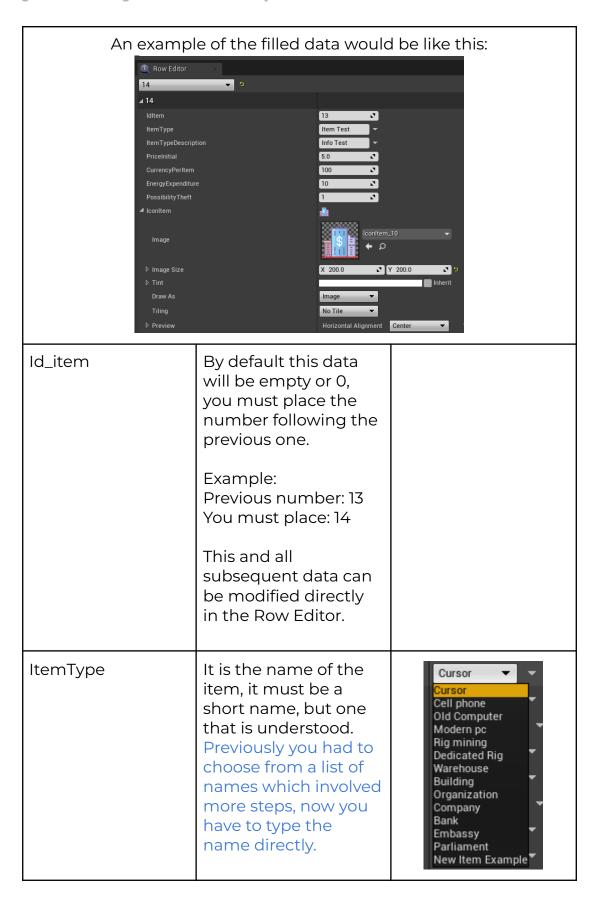




(Item 14)

Note:

All the images that follow in this table belong to a previous version, but they serve to illustrate, that is, in **ItemType** a Select is shown when it is now an InputText, that is, before you had to do more steps to create a new item, now you only have to modify your item in one place, as you can see in the image item 14 with the empty fields ready to fill.





ItemListDescription	It is the description of the item, which is, I recommend not to write much. Previously you had to choose from a list of names which involved more steps, now you have to write the description directly.	Autoclick once every 1 second. Autoclick once every 1 second. It produces some cryptos old computer produces few cryptos. Produces moderately cryptos Produces more cryptos Produce large number of crypts Produce Many cryptos It produces rivers of cryptos Create small business of cryptos Generates profit per crypto sold Produces interests on cryptos Controls the cryptos traffic Create tax for the use of crypts Description example
PriceInitial	It is the initial or base value to be able to buy the item, try to make the value greater than a previous item and maintain a progressive price. Remember to adjust the prices so that the game is not too hard or too easy.	PriceInitial 15.000000 100.000000 1000.000000 10000.000000 100000.000000 1000000.000000 10000000.000000 10000000.000000 200000000.000000 50000000.000000 50000000.000000 100000000.000000 50000000000
CurrencyPerItem	It is the number of coins that the item will generate every second, make sure that the value is greater than a previous item.	CurrencyPerItem 1 5 15 100 500 1500 2500 5000 10000 50000 100000 300000 100



EnergyExpenditure

It is the item's energy expenditure, every 10 seconds, and is subtracted from

CurrencyPerItem

Example:

П	5
EnergyExpenditure	-5
CurrencyPerItem	10

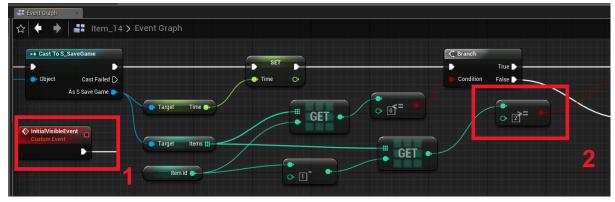
In other words, a cell phone generates 10 coins every second, but every 10 seconds it consumes 5 coins that are used to pay for energy, this consumption is charged in the last payment.

In other words, every 10 seconds, 100 coins are generated in total, but subtracting the 5 energy, a profit of 95 coins was generated.

EnergyExpenditure
0
2
50
25
100
200
500
10000
10000
700
1000
1000
1500
10

PossibilityTheft	It is the percentage of coin theft of the item, it goes from 0 to 100% Try to balance the percentage to be fair.	PossibilityTheft 0 10 25 15 10 20 30 35 45 65 75 85 90 1
IconItem	It is the icon of the item, you must upload it to the folder: Content/EasyClickerTempl ate/Assets/Template_01/Textures/ItemIcon Then add it to the table by selecting the image. In addition you must set a size of 200x200.	Iconitem 13 Array elements 1

2.2.11 In the File **Items_All>Event Grapt>InitialVisibleEvent** You can set when the item is visible for purchase by the number obtained from the previous item.



2.2.12 Edit the value of the second green get that leads to a Breack, by default it is 2, change it to another value, example 3, that is,



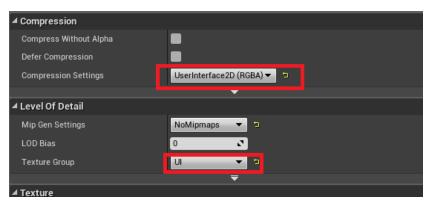
getting the previous item 3 times will reveal our item, This will apply to all items.

If you want it to be independent for each item, you must add a new variable of type integer or float in ItemsListVar, fill the data in ItemsList_db, create a new temporary variable in Items_all, fill it in the function **Inicialice**Variables and then drag that variable as GET and connect the node where the 2 is. If it sounds confusing you can ask for help on Discord.



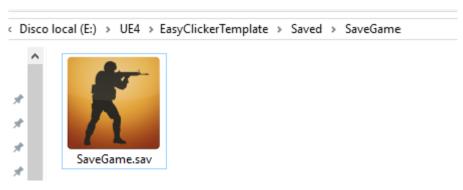
This is how an item looks when you advance or buy the previous enough number, and when you have enough coins, its name, icon and button to read the information will be displayed.

2.3 About the format and compression of images.



Remember that when saving the images and icons of your game they must have these values, open the image in UE4 or UE5 and you will be able to edit the information (The name varies according to the version).

3. Clean the savegame from the bottom.



We must delete the **SaveGame.sav** file from the folder where you created the project, if when creating a new variable or project modification it is not applied correctly, the internal path is:

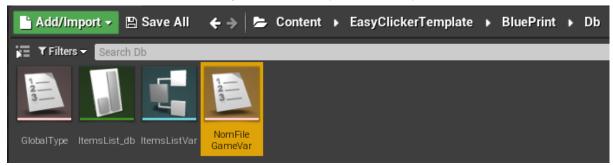
EasyClickerTemplate/Saved/SaveGames.

This will reset all game save data and your project will work just like you ran it the first time, use this in case any new variables you created aren't working or saving correctly.

4. MODIFY THE NAME OF THE SAVEGAME

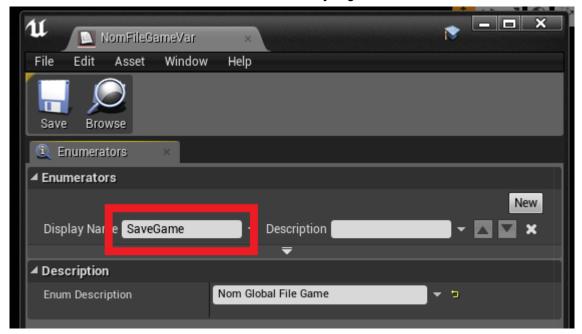
4.1 If you want to change the name of the savegame file open the file **NomFileGameVar** of the route:

Content/EasyClickerTemplate/Blueprint/Db



This class is used to save variables in more detail here - <u>SaveGame</u>.

4.2 You must enter the new name in "Display Name" and save.



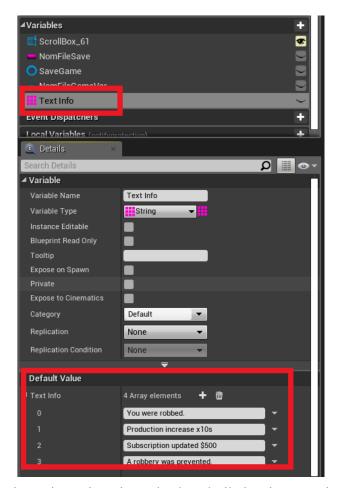
5. MODIFY THE ACTIVITY LOG DESCRIPTION



5.1 Open the blueprint **Wd_ActivityLog** of the route:

Content/EasyClickerTemplate/BluePrint

5.2 Now edit the Text Info variable with the text you want:



Remember that the description is linked to each power.

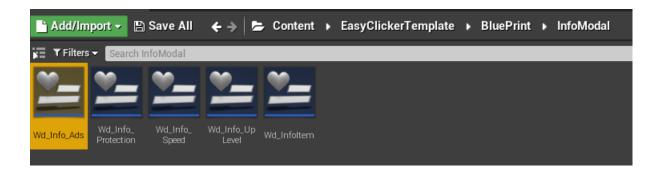


6. ADD ADVERTISING



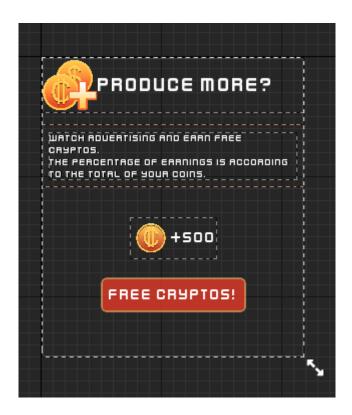
If you want to monetize your game, you must use advertising ADS, see the <u>documentación de UE4</u> To learn how to integrate into your game, we have natively created an item that gives 500 coins when you press a button, you can use this to show advertising videos.

6.1 In order to modify the behavior of this blueprint you must edit the widget **Wd_Info_Ads** found in the route:



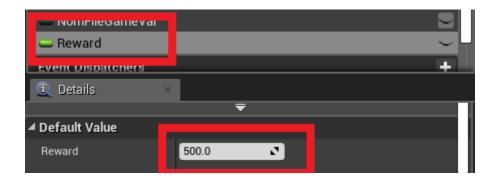
When you open the widget it will have the following layout:





6.2 If you want to increase or decrease the reward of 500 coins you must edit the value of the variable **Reward (Float)** in the Graph tab.

Keep in mind that this is the base value, since the more coins you have, the reward for ADS will increase to encourage you to use this module.



7. CHANGE AND CUSTOMIZE THE LEVEL

There are two levels **Level_H** that loads the BluePrint Horizontal and **Level_V** that loads the BluePrint Vertical, in these levels the widget is started in the **BeginPlay** event.

There is currently a button to change levels as an example, but I recommend that the game has only one orientation.



8. EXPORTAR PARA ANDROID

- 1. To export your game to android you must have the android SDK installed and configured to use in UE4, you can <u>leer la documentación</u>, to follow the correct steps.
- 2. I recommend installing the android SDK libraries along with UE4 when you install <u>Visual Studio</u>.
- 3. A game for android is vital to reduce weight, we recommend following the <u>documentación</u> to achieve 50mb in your game.
- 4. It is important that if you plan to publish your game you follow point 2.0 of the "CREATE NEW ITEM" since otherwise the texture will show an error.

Info: To fix the problem a unable to read accept sdk license follow the steps in this video: https://youtu.be/F8d247Df6gg - How To Fix Unable to read package in Unreal Engine, Code Prof (2020).



9. GAME CLOSES ERROR SOLUTION ON ANDROID

@S3rg385 - AnkhM, gave a solution to prevent the game from closing on Android, it is a rare error but if this is your case here is the solution:

1. There will be the file **AndroidEngine.ini** is found in:

"Your_UE4_Install_Folder\Engine\Config\Android"

2. Edit the variable **gc.MaxObjectsInGame** for a larger value. very big.

```
[/Script/Engine.Engine]

; DefaultBloomKernel is not used on mobile
DefaultBloomKernelTextureName=/Engine/Engine

[PlatformCrypto]
PlatformRequiresDataCrypto=True
PakSigningRequired=False

[/Script/Engine.GarbageCollectionSettings]
gc.MaxObjectsInGame=131072

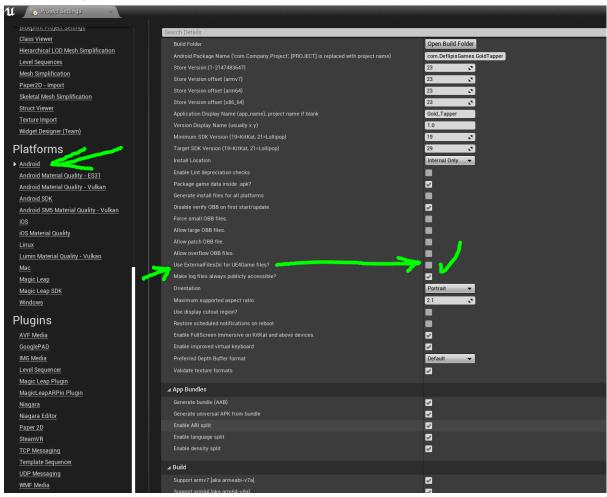
[Audio]
AudioDeviceModuleName=AndroidAudio
; Uncomment below (and comment above) to use
```



10. DO NOT CREATE SAVEGAME ON ANDROID.

It is possible that the SaveGame file is not created in Android, this is because depending on the EU version and the Android SDK some characteristics change, causing the Savegame not to be created in the path that it should.

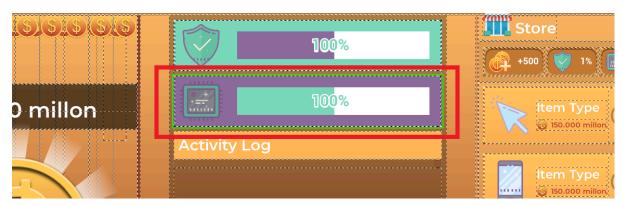
To fix this, just check this box "Use ExternalFilesDir for UE4Game files?":



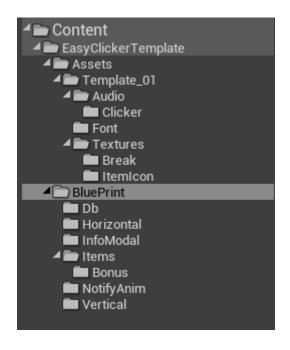
If this does not work try following the steps in the following link: https://defconnet.work/en/how-android-save-games-work-ue4-27/



11. HIERARCHY OF THE PROJECT.



You can delete, move or create your own custom widgets, below is the hierarchy to have a good order.



BluePrint	In this folder all the blueprints of the widgets are saved
Blueprint>Db	The item structure, the item table and the savegame name variable are saved.
BluePrint>Items	All item widgets and power items are saved.
BluePrint>Horizontal	Save all vertical widgets used in Wd_Maid_h such as item info pop-ups, and power widgets.
BluePrint>Vertical	All vertical widgets used in Wd_Maid_v such as item info pop-ups, and power widgets are saved.



BluePrint>NotifyAni m	All notification widgets are saved
Blueprint>InfoModal	All widgets that load into the widget Wd_ModalGlobal_h or Wd_ModalGlobal_v
Assets>Template_01	In this folder all the images of the interface, the sounds, the font and other assets necessary to give the game a design are saved.



12. CHANGE THE FONT

To change the font, you just need to copy the new font in the following address:



For this example we will use the Bubblegum Sans font:

abcdefghijklmnopqrstuvwxyz ABCDEFGHIJKLMNOPQRSTUVWXYZ O123456789 (!@#\$%&.,?;;)



You can download it from this <u>link</u>, once the font is unzipped, we drag it to the fonts folder, and a notification window will appear to which we will press "Yes All" and then we will click on the save button.

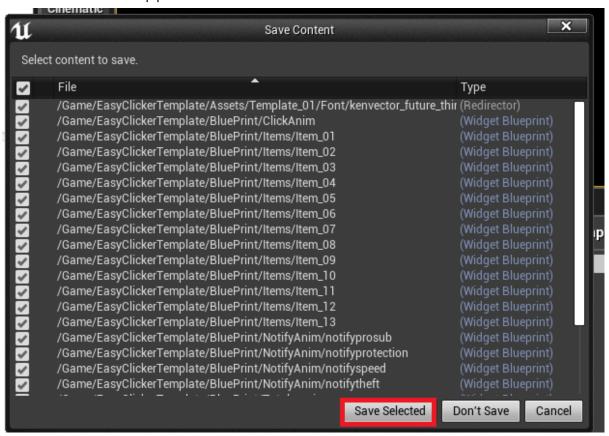


Now we will delete the previous font that would be:

"kenvector_future_thin_Font", a window will appear that tells us all the blueprints that refer to said font, we select the new font and press replace references.



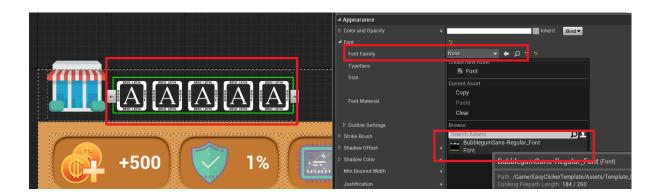
This window will appear and click on save.







It is possible that some blueprints do not update their font and you have to edit the new font by hand, for that you just have to open the blueprint, choose the font and click on save.



And ready now we will have our project with a new source.

13. NEW Tutorial Use Small Coins



ΕN

https://docs.google.com/document/d/1-jFx5gsNlbSNJyDikFVrDQjG_OgNL0yd828aXch7Xh8/edit?usp=sharing

ES

https://docs.google.com/document/d/lsm_UFerRx34aEJneqiQ-R0DsDQppcbgo_-pSTZENsr8/edit?usp=sharing

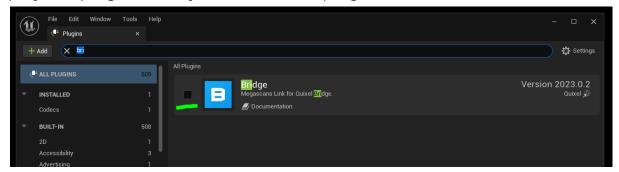
14. Failed to pack in UE5

There is a possibility when packaging the game and the following error:

LogPlayLevel: Error: UAT: LogPluginManager: Error: Unable to load plugin 'Bridge'. Aborting.

Or, failing that, the game will not exist when packaged, this is because there is an add-on called Bridge that is installed together with the graphics engine.

The error is caused by the Quixel Bridge plugin, you can disable it from the project's plugin list, so you can find the plugin:





Online Support Channel - <u>Discord channel.</u> Thank you for attention. With best regard Tomas (AVAROZ).

